

38-10(15493)C

IN THE UNITED STATES PATENT AND TRADEMARK OFFICEIn re application of David F. Bush *et al.*

Art Unit: 1634

Serial No: 09/692,412

Examiner: Einsmann, Juliet Caroline

Filed : 10/20/2000

For: Plant Polymorphic Markers and Uses Thereof

**RESPONSE TO REQUIREMENT
FOR INFORMATION UNDER 37 CFR 1.105**

Assistant Commissioner for Patents
Washington, DC 20231

Sir:

Responsive to the Requirement for Information under 37 CFR 1.105 mailed by the Patent Office on October 8, 2002 and setting forth a two months period for response, Applicants provide the following.

Re paragraph 3 of the Requirement for Information.

Copies of two publications co-authored by one or more inventors named on the present application are enclosed.

Analysis of the genome sequence of the flowering plant *Arabidopsis thaliana*, *Nature* 408:796-814 (December 14, 2000). S. Rounsley *et al.* are authors of a section of this paper entitled "Comparative analysis of the genomes of *A. thaliana* accessions" which appears at page 801 of the publication. No portion of the marker dataset was disclosed in conjunction with this publication, although a reference to the TAIR website was provided.

Jander *et al.* (2002) Arabidopsis Map-Based Cloning in the Post-Genome Era, *Plant Physiology* 129:440-450. A small portion of the marker dataset was disclosed in this publication.

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Re paragraph 4 of the Requirement for Information.

A printout of pages available at the TAIR website is attached. The pages provide information on the date of initial availability of the Cereon Arabidopsis marker dataset and the contents and dates of availability of updates to the dataset. Applicants note that registration is not required for access to this summary information available at the website www.arabidopsis.org/Cereon/help.html. Furthermore, if the Examiner wishes to personally access the marker information at the above website, the below undersigned representative of Applicants' would be happy to provide a user name and password to allow the Examiner to access the information. In response to parts a. and b. of this request, Applicants provide the following summary of the data releases and their relation to the present application and its priority documents. Importantly, Applicants note that any information in the present application that was released on the TAIR website, was released after the information was filed in either the present application or one of its related applications.

Release 1: Released May 3, 2000

25,274 SNPs
14,041 InDels

To the best of Applicants' knowledge, the 25,274 SNPs in Release 1 correspond to the 25,274 SNPs presented in Applicants' priority application filed March 29, 2000 (serial number 09/534,859).

In particular, Applicants note that the polymorphisms recited in the pending claims, 466799 and 471736, were not present in Release 1.

The 14,041 InDels in Release 1 are all, to the best of Applicants' knowledge, present in Applicants' priority application filed March 29, 2000 (serial number 09/534,859). The priority application also contained additional InDels larger than 100 bp that were excluded from the

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Release 1 dataset on the initial Release date as indicated on the enclosed information from the TAIR website.

Release 2: Released November 16, 2000

2843 SNPs
1633 InDels

To the best of Applicants' knowledge, the 2843 SNPs in Release 2 correspond to the 2843 SNPs presented in Applicants' present application filed October 20, 2000 (serial number 09/692,412).

In particular, Applicants note that the polymorphisms recited in the pending claims, 466799 and 471736, were present in Release 2, dated November 16, 2000.

The 1633 InDels in Release 2 are all, to the best of Applicants' knowledge, present in Applicants' present application filed October 20, 2000 (serial number 09/692,412). This application also contains additional InDels larger than 100 bp that were excluded from the Release 2 dataset at its initial release date as indicated on the enclosed information from the TAIR website.

Release 3: Released March 21, 2001

9226 SNPs
2905 InDels
42 Large InDels

Applicants note that although the release notes indicate the release of 9227 SNPs and 43 large InDels, the actual numbers were 9226 and 42, as determined by downloading the marker set from the TAIR site.

To the best of Applicants' knowledge, the 9226 SNPs in Release 3 are all present in the set of 37,343 SNPs in Applicants related later filed application filed on March 12, 2001 (serial

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number 09/803,736). Applicants note that the marker set in the 09/803,736 application is cumulative and contains the SNPs from all three TAIR releases.

The 2905 InDels and 42 large InDels in Release 3 are all, to the best of Applicants' knowledge, present in Applicants' related later filed application filed on March 12, 2001 (serial number 09/803,736).

In response to part c. of this request, Applicants note that information on the data format requested by the Examiner is provided at page 2 of the TAIR website printout provided herein. Applicants note that polymorphism locations are provided by chromosome and with reference to their location in the public BACs referenced in the tables. Oligonucleotides for amplification are not provided, but 20 bp of sequence directly to the left and right of the polymorphism is provided.

CHANGE OF CORRESPONDENCE ADDRESS

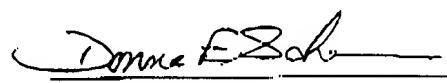
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